

### **REMARKS**

Claims 1-22 are currently pending in the subject application and are presently under consideration. In the Office Action dated February 6, 2008, all claims were rejected. In the present response, Applicants amend the specification and claims 5, 15, and 21, and traverse the rejections as follows.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Objection of Claims 5 and 15**

Claims 5 and 15 are objected to because of the following informalities: The subject claims are ambiguous, the context of the claims does not make sense. Applicants believe that these claims are clear on their face. However, in order to advance the application towards allowance, Applicants have amended claims 5 and 15 to more clearly define the subject matter.

#### **II. Rejection of Claim 21 Under 35 U.S.C §112**

Claim 21 stands rejected under 35 U.S.C §112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim is allegedly a single-means claim, which is subject to an undue breadth rejection (MPEP 2164.08(a)). Applicants have amended claim 21 to add a means for transmitting and a means for receiving. Therefore, it is believed that the rejection has been overcome.

#### **III. Rejection of Claim 22 Under 35 U.S.C §112**

Claim 22 stands rejected under 35 U.S.C §112, first paragraph, as based on a disclosure which is not enabling. Applicants respectfully disagree. Paragraph 0149 describes a multitude of storage media which has computer-readable instructions stored thereon:

“The methods or algorithms described in connection with the embodiments disclosed herein may be embodied directly in hardware, in a *software module* executed by a processor, or in a combination of the two. *A software module may*

*reside in RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art.” (Specification, paragraph 0149, emphasis added)*

Applicants respectfully request that the rejection to claim 22 be withdrawn in light of the above-cited section of Applicants’ specification.

#### **IV. Rejection of Claims 1-22 Under 35 U.S.C. §102(e)**

Claims 1-22 stand rejected under 35 U.S.C. §102(e) as being anticipated by Johansson, et al. (US Patent 7,058,050). It was alleged that Johansson et al teaches all of the elements of Applicants’ claimed subject matter. Applicant respectfully disagrees.

Regarding all of Applicants’ independent claims, namely claims 1, 11, 21, and 22, Applicant believes that Johansson et al. fails to teach several elements recited in these claims. Each independent claims recite “a controller configured to *automatically and repeatedly* cause the network node to *cycle back and forth between transmitting* information on a network with the transmitter *and receiving* information with the receiver from the network, *wherein the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern.*

**a. Johansson et al. fails to teach a network node that *automatically and repeatedly* causes the network node to *cycle back and forth between transmitting* information on a network with the transmitter and *receiving* information with the receiver from the network.**

Johansson et al. describes inter-piconet communications featuring a JUMP node that is responsible for relaying communications between two piconets. The JUMP node enters a JUMP mode that allows it to alternate communications between the two piconets without becoming disconnected from either network. Johansson et al. further discloses several methods for managing inter-piconet communications, including 1) predetermined fixed starting point and length communication windows, 2) time points with flexible

starting points and communication window length, and/or 3) random starting time and length communication windows. (See *Johansson et al.*, abstract)

It was alleged that Johansson et al. teaches a node that “***automatically and repeatedly transmits and receives*** information from the network” in Figure 7B and in column 17, line 43 through column 18, line 20. The description in the cited paragraphs from Johansson et al. describe the “time point” method for providing inter-piconet communications. The time point method defines a single point in time, time slot, or time interval where communications may start, without defining the exact length of the communication window. (*Johansson et al.*, column 17, lines 46-51) The time point may be periodically repeated. However, this is not the same as ***automatically and repeatedly transmitting and then receiving*** information from a network, as recited in all of Applicants’ independent claims. The system described by Johansson et al. defines a predetermined point in time to initiate communications, and the predefined point in time may be periodically repeated (for example, a predetermined time slot in a Bluetooth protocol). However, it is the ***time point*** that is periodically repeated, not an automatic repetition between transmitting and receiving modes. Based on this analysis alone, the rejection to independent claims 1, 11, 21, and 22 should be withdrawn.

**b. Johansson et al. fails to teach that the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern**

In the communication system taught by Johansson et al., there is no teaching or suggestion that the transmission windows vary in accordance with ***a pre-determined pattern***. It was alleged that Johansson et al. teaches this feature in column 18, lines 5-12 and in column 7, lines 1-4. Column 18, lines 5-12 are reprinted as follows:

“The actual communication session window length...is not negotiated but is flexible and may be based on various factors such as the number of piconets connected to a JUMP node, communication traffic through the JUMP node, etc.”

The above cited passage from Johansson et al. fails to teach that either transmissions or receptions vary in accordance with a pre-determined pattern. Johansson et al. only teaches that the communication session window length is flexible and that it may be based on one or more factors relating to the performance of the communication system. Rather than being pre-determined, the length of the time window taught by Johansson et al. varies in accordance to factors that *cannot be pre-determined*, as it cannot be predetermined how many piconets might be connected to a JUMP node at any time or the amount of traffic being communicated through the JUMP node. Again, on this basis alone, Applicants believe that the rejection to claims 1, 11, 21, and 22 should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [QUALP839US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/

Himanshu S. Amin

Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone (216) 696-8730  
Facsimile (216) 696-8731